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This message has been sent to you as a service of the U.S. Pharmacopeia, Center for the Advancement of Patient Safety (CAPS). USP is a not-for-profit, non-governmental organization that promotes the public health by establishing state-of-the-art standards to ensure the quality of medicines and other health care technologies. CAPS is a component of USP's Patient Safety public health program. USP's Center for the Advancement of Patient Safety was created to encourage medication error reporting, conduct data analysis and research, develop educational programs, and propose standards, recommendations, and guidelines that ultimately improve the safety and quality of patient care.

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1) Improper Administration Technique Harmful to Patients: Costly to Health Systems

Certain types of medication errors are more likely to cause harm or death to patients, according to a new data report recently released by the United States Pharmacopeia's (USP) Center for the Advancement of Patient Safety (CAPS). *Summary of Information*

Submitted to MEDMARXSM in the Year 2001: A Human Factors Approach to Medication Errors is the latest analysis of medication error reports captured in 2001 by MEDMARX, the national reporting database operated by USP. This third annual report from USP is the most comprehensive and current compilation of medication error data submitted by hospitals and health systems nationwide.

Though relatively few errors overall (2.4%) resulted in harm, wrong administration technique errors were harmful 8% of the time - over 3 times higher than the overall percent of harmful errors. In general, the 2001 data also show that patients who experience harmful errors require additional care that can result in longer hospital stays, antidotes, and additional diagnostic tests. This increased level of care leads to increased hospital costs both directly and indirectly.

Currently, MEDMARX is the only national medication errors database available to hospitals and healthcare systems. Each year, USP analyzes the medication errors that MEDMARX receives from subscribing facilities. This year's report includes data from more than 105,000 medication errors reported by 368 healthcare facilities nationwide. These facilities vary in bed size, type of facility (community, specialty, or teaching institution), and operator type (non-profit, for profit, or governmental). To order a copy of the MEDMARX 2001 data report, visit www.MEDMARX.com.

2) Medical Errors Not a Top Concern for Physicians or Public

A recently published study in the Dec. 12 edition of *The New England Journal of Medicine* suggests that medical errors are not a top concern for physicians or the public. The survey, conducted by the Harvard School of Public Health and the Kaiser Family Foundation, found 42% of the public and 35% of physicians have experienced medical errors while 24% of the public experienced "serious health consequences" as a result of the errors. However, few described medical errors as one of the most serious problems in health care. Only 5% of physicians and 6% of the public identified medical error as a top concern. Lawsuits, health care costs, professional liability, and cost of prescription drugs were seen as the top problems facing health care and medicine.

<http://content.nejm.org/cgi/content/abstract/347/24/1933>

3) Hospital Report Cards to Publicize Data on Quality of Care

A national coalition of organizations representing hospitals and physicians recently announced plans to make hospital quality report cards available to the public. The voluntary online reporting system is a joint effort between HHS, JCAHO, the National Quality Forum, the American Hospital Association, the Federation of American Hospitals, and the Association of American Medical Colleges. The program will detail how well hospitals perform on 10 measures relating to heart attack, heart failure, and pneumonia. The voluntary program is expected to get under way next summer, and performance data will be available at the Centers for Medicare & Medicaid Services Web

site. <http://www.hhs.gov/news/press/2002pres/20021212.html>
http://www.hospitalconnect.com/aha/press_room-info/jsp/releasedisplay.jsp?dcrpath=AHA/Press_Release/data/PR_021212_Quality&domain=AHA

4) Wisconsin Hospitals to Measure Quality

Beginning in 2004, Wisconsin will require the state's hospitals to provide information on safety and the quality of care to state employees. Hospitals will be required to implement certain programs, including computerized systems to reduce prescribing errors, that are recommended by the Leapfrog Group, a business consortium that promotes patient safety.

<http://www.jsonline.com/by/news/nov02/99987.asp>

5) Safety Tools to Cut Medication Errors

AHA, the Health Research and Educational Trust, and the Institute for Safe Medication Practices with support from The Commonwealth Fund, have designed a set of tools to reduce medication errors and help hospitals take a system-based approach to address such errors. USP was a member of the advisory committee that assisted in the development of the tools -- Pathways for Medication Safety - that are organized in a modular format to accommodate different organizations and professionals. There are three main components that will help hospital leaders and professionals to: (1) incorporate medication safety into the organization's strategic plan; (2) identify specific error-prone processes and devise safe alternatives using a process flow diagram, case scenarios and the ISMP's 10 Key Elements of Medication Use System; and (3) prepare to implement a bedside bar-coding system for administering medications. Pathways for Medication Safety is available free of charge at <http://www.medpathways.info>

6) Benchmarks Could Help Save Lives and Dollars

A recent report released by the Solucient Leadership Institute entitled, *100 Top Hospitals National Benchmarks for Success* suggests that if overall performance in all acute care U.S. hospitals was the same as the nation's top hospitals, patient safety could improve and hospitals could save nearly \$9.5 billion in annual expenses each year. If all hospitals performed at benchmark levels, the number of medical complications could decrease by more than 18%. Launched in 1993, the 100 Top Hospitals National Benchmarks for Success program identifies the top-performing hospital management teams throughout the nation based solely upon empirical findings from publicly available data. The report recognizes 100 hospitals for setting Solucient benchmarks for quality of care, operational efficiency, financial performance, and adaptation to the environment, and can be accessed

at Solucient's Web site <http://www.100TopHospitals.com>

7) NCQA Releases Draft Human Research Protection Standards

The National Committee for Quality Assurance (NCQA) is accepting comments through Jan. 16 on draft standards for the organization's Human Research Protection Accreditation Program. The standards are based on an accreditation program developed by NCQA last year for the Department of Veterans Affairs. <http://www.ncqa.org/communications/news/hrpapdraftstds.htm>

8) Reports Highlight Medication-Adherence Problems

The Dec. 11 Journal of the American Medical Association includes reviews from a Canadian research team highlighting the need and importance inpatient counseling leading to improved adherence to their medication regimens. The researchers suggested that adherence to treatments lasting two weeks or less can be achieved by counseling patients and providing them with clear, written instructions. According to the researchers, adherence to long-term therapy requires more intensive interventions, such as simplifying medication regimens, ensuring patients keep appointments with their physicians, and reinforcing the importance of following the medication regimen. [http://jama.ama-assn.org/issues/v288n22/abs/jsr20016.html\(abstract\)](http://jama.ama-assn.org/issues/v288n22/abs/jsr20016.html(abstract)) <http://jama.ama-assn.org/issues/v288n22/abs/jsr20017.html> (abstract)

9) MEDMARX4 2001 Data Details: A Look at Emergency Department Errors

The emergency department (ED) has become an epicenter of activity in our nation's hospitals. The combination of interruptions, intense pressure, and a fast-paced environment can lead to medication errors. In 2001, MEDMARX participating hospitals reported more than 2,000 emergency department-related medication errors. Report highlights are as follows:

- Overall, omission of medication was the leading medication error in hospital systems; however, improper dosing/quantity was the leading medication error in the ED.
- Of the medication errors cited in the ED, 77% occurred during the prescribing and administering phases.
- Fewer errors are intercepted in the ED compared to other areas of the hospital. In the ED, nearly 23% of errors were intercepted before reaching the patient as opposed to nearly 39% intercepted in other areas of the hospital.
- Pediatric medication errors that involved improper dosing of the vaccine diphtheria tetanus toxoid were common in EDs.

Top Drug Errors in Emergency Departments

Type of Error	Product
Improper Dose	1. Heparin*
	2. Diphtheria/Tetanus Toxoids (For pediatric use)
	3. Diltiazem
	4. Morphine*
	5. Insulin*
Omission	1. Ceftriaxone
	2. Insulin*
	3. Heparin*
	4. Levofloxacin
	5. Potassium Chloride*
Prescribing	1. Levofloxacin
	2. Ceftriaxone
	3. Acetaminophen
	4. Heparin*
	5. Insulin*
	6. Ketorolac

*Denotes high-alert medication

For a copy of the MEDMARX 2001 data report, send an e-mail to mediarelations@usp.org. For more information on MEDMARX, visit www.MEDMARX.com.

10) PA Hospitals Report Fewer Deaths and Shorter Patient Stays

A new report by an independent state agency found Pennsylvania hospitals had lowered mortality rates and the length of patient stays over a three-year period. The Pennsylvania Health Care Cost Containment Council's latest hospital performance report examined 28 common medical procedures and treatments for illnesses, ranging from heart attacks and strokes to diabetes and pneumonia, at hospitals across the state. Between 1999 and 2001, the length of a hospital stay decreased in nine of 12 medical procedures while mortality decreased in 10 of 11 procedures or treatments. Inpatients with kidney failure

experienced the largest decrease where the death rate dropped from 11.3% to 9.4%. To read an expanded version of the report online, go to www.phc4.org

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USP operates two complementary error reporting programs; the **Medication Errors Reporting Program** which operates in cooperation with the Institute for Safe Medication Practices and **MedMARxSM**. MedMARx is an Internet-accessible, anonymous medication error reporting program and quality improvement tool used to track and trend medication errors. For more information, visit www.usp.org

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